Listing of Claims

1. (Currently Amended) A directory gatekeeper for performing alternate routing of calls through a plurality of outbound gateway resources, the directory gatekeeper comprising:

one or more communication devices ~~providing access~~ communicatively coupled to a plurality of resource management gatekeepers, each resource management gatekeeper associated with one or more of the plurality of outbound gateway resources, wherein each outbound gateway resource periodically reports the outbound gateway resource's availability to the outbound gateway resource's associated resource management gatekeeper;

another communication device communicatively coupled to an inbound gatekeeper, the inbound gatekeeper operable to send a routing request to the directory gatekeeper in response to receiving a call setup request and direct the call to an outbound gateway resource determined by the directory gatekeeper;

memory storing a list of routes, each route being associated with a resource management gatekeeper;

a processor operable to perform alternate routing by selecting one of the routes and sending ~~send~~ a resource request to [[a]] the resource management gatekeeper corresponding to the selected route ~~selected resource management gatekeeper~~ to initiate [[a]] the call through [[a]] an outbound gateway resource associated with the selected resource management gatekeeper,

wherein in response to receiving the resource ~~a received~~ request, the selected resource management gatekeeper ~~performs alternate routing by dynamically determining~~ checks outbound gateway resource availability to determine an available outbound gateway resource among the one or more gateway resources associated with the selected resource management gatekeeper, and ~~notifying~~ notifies the directory gatekeeper of ~~the determined~~ the determined available outbound gateway resource, and wherein the directory gatekeeper notifies [[an]] the inbound gatekeeper of the available outbound gateway resource, to cause the inbound gatekeeper to direct ~~whereby~~ the call ~~can be directed~~ through the available outbound gateway resource.

2. (Original) The directory gatekeeper of claim 1, wherein one of the one or more communication devices provides access to a packet-based network.

3. (Original) The directory gatekeeper of claim 2, wherein the packet-based network is an Internet protocol (IP) network.

4. (Original) The directory gatekeeper of claim 1, wherein the one or more communication devices provides access to the public switched telephone network (PSTN).

5. (Currently Amended) The directory gatekeeper of claim 1, wherein ~~performing alternate routing of calls includes~~ the processor selects a route by performing operations comprising:

identifying one or more candidate routes based on the received routing request; and

for each of the one or more candidate routes,

selecting a candidate route from the one or more candidate routes~~;~~

~~determining if the selected candidate route is available; and~~

~~if the selected candidate route is available, sending a response to the received request indicating that the candidate route is available~~.

6. (Currently Amended) The directory gatekeeper of claim [[5]] 1, wherein the memory further comprises a list of Numbering Plan Areas (NPAs) corresponding to routes in the list of routes, wherein performing alternate routing of calls further includes:

selecting a route from the list of routes based on an NPA of a called endpoint device associated with the call setup request.

~~if none of the candidate routes are available, sending a response to the received request indicating that the request can not be completed.~~

7. (Original) The directory gatekeeper of claim 5, wherein selecting a candidate route from the one or more candidate routes includes selecting the least cost route as the candidate route.

8. (Original) The directory gatekeeper of claim 5, wherein selecting a candidate route from the one or more candidate routes includes selecting a candidate route from the one or more candidate routes at a predetermined ratio.

9. (Original) The directory gatekeeper of claim 8, wherein the predetermined ratio is selected such that the likelihood of choosing each of the one or more candidate routes is substantially equal.

10. (Currently Amended) A method for performing alternate routing of calls in a directory gatekeeper, the method comprising:

receiving a request to initiate a call at an inbound gatekeeper; and

in response to receiving the request to initiate the call:

sending a routing request to a directory gatekeeper to request a route for terminating the call;

determining, by the directory gatekeeper, a list of possible routes for terminating the call;

selecting a route from the list of possible routes by querying a selected resource management gatekeeper to ~~dynamically~~ determine availability of outbound gateway resources associated with the selected route based on outbound gateway resource availability periodically reported to the selected resource management gatekeeper;

if a route is available, sending a response to the received request to initiate a call indicating the selected route; and

if a route is not available, sending a response to the received request to initiate a call indicating that the request will not be completed.

11. (Currently Amended) The method of claim 10, further comprising selecting a route from the list of possible routes by querying another resource management gatekeeper to dynamically determine availability of outbound gateway resources associated with the selected route.

12. (Currently Amended) The method of claim 11, wherein the list of possible routes includes routes corresponding to~~number includes~~ a numbering plan area (NPA) associated with the call.

13. (Original) The method of claim 10, wherein the request to initiate a call is an H.323 admission request (ARQ) message.

14. (Original) The method of claim 10, wherein each route in the list of routes is associated with a resource management gatekeeper.

15. (Original) The method of claim 14, wherein the step of selecting a route from the list of possible routes by querying one or more resource management gatekeepers includes:

for each route in the list of possible routes,

selecting a candidate route from the list of possible routes; and

determining if the selected candidate route is available.

16. (Original) The method of claim 15, wherein selecting a candidate route from list of possible routes includes selecting the least cost route as the candidate route.

17. (Original) The method of claim 15, wherein selecting a candidate route from the list of possible routes includes selecting a candidate route from the list of possible routes at a predetermined ratio.

18. (Original) The method of claim 17, wherein the predetermined ratio is selected such that the likelihood of choosing each of the one or more candidate routes is substantially equal.

19. (Currently Amended) A computer-readable medium including software for performing alternate routing of calls through a plurality of outbound gateway resources, the software configuring a computer to perform a method, the method including:

receiving a request to initiate a call;

in response to receiving the request to initiate the call, determining a ~~first~~ list of possible routes for terminating the call, wherein each route corresponds to a management gatekeeper managing a plurality of outbound gateway resources;

selecting a route from the list of possible routes;

~~by~~ querying a first management gatekeeper associated with the ~~first~~ selected route ~~list of possible routes~~, to ~~dynamically~~ cause the first management gatekeeper to determine availability of outbound gateway resources associated with the selected route by checking outbound gateway resource availability periodically reported to the first management gatekeeper by the plurality of outbound gateway resources managed by the first management gatekeeper;

if outbound gateway resources associated with the selected route are available, sending a response to the received request to initiate a call through the outbound gateway resources of the selected route; and

if outbound gateway resources associated with the selected route are not available, sending a response to the received request to initiate a call indicating that the request will not be completed.

20. (Currently Amended) The computer-readable medium of claim 19, the method further comprising:

determining that outbound gateway resources managed by the first management gatekeeper are not available ~~on any of the routes in the first list of routes~~;

selecting another route from the list of possible routes; and

querying a second management gatekeeper associated with the other selected route~~a second list of routes~~, to cause the second management gatekeeper to ~~dynamically~~ determine availability of outbound gateway resources associated with the other selected route by checking outbound gateway resource availability periodically reported to the second management gatekeeper by the plurality of outbound gateway resources managed by the second management gatekeeper ~~one or more of the routes of the second list of routes~~.

21. (Currently Amended) The computer-readable medium of claim 20, wherein the routes in the list of possible routes correspond to ~~number includes~~ a numbering plan area (NPA) associated with a called endpoint of the call.

22. (Original) The computer-readable medium of claim 19, wherein the request to initiate a call is an H.323 admission request (ARQ) message.

23. (Currently Amended) The computer-readable medium of claim 19, wherein the first management gatekeeper determines availability of outbound gateway resources by excluding certain outbound gateway resources ~~each route in the list of routes is associated with a resource management gatekeeper~~.

24. (New) A system for routing calls through a network, the system comprising:

an inbound gatekeeper operable to receive requests to setup calls and issue routing requests for determining routes for requested calls;

a plurality of resource zones, wherein each zone has an associated resource management gatekeeper and a plurality of outbound gateway resources configured to terminate calls received by the inbound gatekeeper, wherein each outbound gateway resource is further

configured to periodically report the outbound gateway resource's availability to the resource management gatekeeper of the associated resource zone; and

a directory gatekeeper having memory storing a plurality of routes through the resource zones, each route corresponding to one of the resource management gatekeepers, and wherein, in response to a routing request received from the inbound gatekeeper, the directory gatekeeper requests an outbound gateway resource from a resource management gatekeeper associated with a selected route, and

wherein the selected resource management gatekeeper checks for an available outbound gateway resource among the plurality of outbound gateway resources in the resource zone of the selected resource management gatekeeper,

wherein if an available outbound gateway resource is identified in the resource zone, the selected resource management gatekeeper notifies the directory gatekeeper of the available outbound gateway resource, and

wherein if an available outbound gateway resource is not identified in the resource zone, the directory gatekeeper requests resources from another resource management gatekeeper in another zone by selecting another route corresponding to the other resource management gatekeeper.

25. (New) The system of claim 24, wherein each resource management gatekeeper is operable to exclude certain outbound gateway resources during checking for available outbound gateway resources.

26. (New) The system of claim 25, wherein each resource management gatekeeper is operable to exclude certain gateways when the associated zone is associated with a given carrier and the requested call is associated with a given area code.